AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended): A method of reducing an electrostatic charge on a substrate during a plasma enhanced chemical vapor deposition process, comprising the step of:

depositing a conductive layer onto a top surface of a susceptor support plate disposed within a deposition chamber; and

~~wherein the conductive layer dissipates~~ dissipating the electrostatic charge on ~~the~~ a bottom surface of the substrate during a plasma enhanced chemical vapor deposition process via said conductive layer, thereby reducing the electrostatic charge on the substrate.

Claim 2 (original): The method of claim 1, wherein the depositing of the conductive layer onto the top surface of the susceptor support plate comprises the steps of:

introducing a silicon-containing gas into the deposition chamber; and

igniting the silicon-containing gas under conditions such that an amorphous silicon conductive layer or a microcrystal silicon

conductive layer is deposited onto the top surface of the susceptor support plate.

Claim 3 (original): The method of claim 2, wherein the silicon-containing gas is selected from the group consisting of silane, disilane, methylsilane, and trimethyl-silane.

Claim 4 (original): The method of claim 2, further comprising introducing a mixture of phosphine and hydrogen gas into the deposition chamber such that a phosphine-doped amorphous silicon conductive layer or microcrystal silicon conductive layer is deposited.

Claim 5 (original): The method of claim 4, wherein the phosphine and hydrogen gas mixture comprises from about 0.5% to about 1% phosphine.

Claim 6 (original): The method of claim 5, wherein the phosphine and hydrogen gas mixture comprises about 0.5% phosphine.

Claim 7 (original): The method of claim 2, wherein the conditions comprise a pressure of about 0.3 Torr to about 10 Torr.

Claim 8 (original): The method of claim 7, wherein the conditions comprise a pressure of about 1.3 Torr.

Claim 9 (original): The method of claim 2, wherein the conditions comprise a radio-frequency power from about 300 W to about 900 W.

Claim 10 (original): The method of claim 9, wherein the conditions comprise a radio-frequency power from about 300 W to about 400 W.

Claim 11 (original): The method of claim 9, wherein the conditions comprise a radio-frequency power of about 900 W.

Claim 12 (original): The method of claim 1, wherein the substrate is an insulative non-metallic material.

Claim 13 (original): The method of claim 12, wherein the insulative non-metallic material is an oxide-based material or a plastic material.

Claim 14 (original): The method of claim 13, wherein the oxide-based material comprises glass, quartz or a ceramic material.

15 (original): The method of claim 1, wherein the depositing of the conductive layer onto the top surface of the susceptor support plate comprises the steps of:

introducing silane into the deposition chamber;

introducing about 0.5% to about 1% phosphine in hydrogen gas into the deposition chamber; and

igniting the gases with an radio-frequency power from about 300W to about 900W at a pressure of about 0.3 Torr to about 10 Torr such that a phosphine-doped amorphous silicon conductive layer or a phosphine-doped microcrystal silicon conductive layer is deposited onto the top surface of the susceptor support plate.

Claim 16 (currently amended): A method of reducing an electrostatic charge on an oxide-based substrate during a plasma enhanced chemical vapor deposition process, comprising the steps of:

introducing silane into the deposition chamber;

introducing from about 0.5% to about 1% phosphine in hydrogen gas into the deposition chamber;

igniting the gases with an radio-frequency power of about 300W to about 900W at a pressure of about 0.3 Torr to about 10 Torr; ~~and~~

depositing a phosphine-doped amorphous silicon conductive layer or a phosphine-doped microcrystal silicon conductive layer onto a top surface of a susceptor support plate; and

~~wherein the phosphine-doped amorphous silicon conductive layer or the phosphine-doped microcrystal silicon conductive layer dissipates~~ dissipating the electrostatic charge on ~~the~~ a bottom surface of the substrate during a plasma enhanced chemical vapor deposition process via said phosphine-doped amorphous silicon conductive layer or the phosphine-doped microcrystal silicon conductive layer, thereby reducing the electrostatic charge on the substrate.

Claim 17 (original): The method of claim 16, wherein the oxide-based substrate is glass, quartz or ceramic.

Claim 18 (withdrawn): A method of depositing a film of material upon a substrate during a plasma enhanced chemical vapor deposition process comprising the steps of:

introducing a silicon-containing gas into the deposition chamber;

igniting the gas under conditions such that a plasma is formed in the deposition chamber;

depositing an amorphous silicon conductive layer or a microcrystal silicon conductive layer onto a top surface of a susceptor support plate;

positioning the substrate on the amorphous silicon conductive layer or the microcrystal silicon conductive layer such that an electrostatic charge on the bottom surface of the substrate induced during a subsequent plasma enhanced chemical vapor deposition process is dissipated through the amorphous silicon conductive layer or the microcrystal silicon conductive layer; and

subjecting the top surface of the substrate to a plasma enhanced chemical vapor deposition process thereby depositing the film of material onto the substrate.

Claim 19 (withdrawn): The method of claim 18, wherein the silicon-containing gas is selected from the group consisting of silane, disilane, methylsilane and trimethylsilane.

Claim 20 (withdrawn): The method of claim 18, further comprising introducing a mixture of phosphine and hydrogen gas into the deposition chamber such that a phosphine-doped amorphous silicon conductive layer or a phosphine-doped microcrystal silicon conductive layer is deposited.

Claim 21 (withdrawn): The method of claim 20, wherein the phosphine and hydrogen gas mixture comprises from about 0.5% to about 1.0% phosphine.

Claim 22 (withdrawn): The method of claim 18, wherein the conditions comprise a pressure of about 0.3 Torr to about 10 Torr.

Claim 23 (withdrawn): The method of claim 18, wherein the conditions comprise a radio-frequency power from about 300 W to about 900 W.

Claim 24 (withdrawn):The method of claim 23, wherein the conditions comprise a radio-frequency power from about 300 W to about 400 W.

Claim 25 (withdrawn): The method of claim 23, wherein the conditions comprise a radio-frequency power of about 900 W.

Claim 26 (withdrawn): The method of claim 18, wherein the substrate is an insulative non-metallic material.

Claim 27 (withdrawn): The method of claim 26, wherein the insulative non-metallic material is an oxide-based material or a plastic material.

Claim 28 (withdrawn): The method of claim 27, wherein the oxide-based material comprises glass,quartz or a ceramic material.

Claim 29 (withdrawn): A method of depositing a film of material upon an oxide-based substrate during a plasma enhanced chemical vapor deposition process comprising the steps of:

introducing silane into the deposition chamber;

introducing from about 0.5% to about 1% phosphine in hydrogen gas into the deposition chamber;

igniting the gases with an radio-frequency power of about 300W to about 900W at a pressure of about 0.3 Torr to about 10 Torr;

depositing a phosphine-doped amorphous silicon conductive layer or a phosphine-doped microcrystal silicon conductive layer onto a top surface of a susceptor support plate;

positioning the oxide-based substrate on the phosphine-doped amorphous silicon conductive layer or the phosphine-doped microcrystal silicon conductive layer such that an electrostatic charge on the bottom surface of the oxide-based substrate induced during subsequent plasma enhanced chemical vapor deposition is dissipated

through the phosphine-doped amorphous silicon conductive layer or the phosphine-doped microcrystal silicon conductive layer; and

subjecting the top surface of the oxide-based substrate to a plasma enhanced chemical vapor deposition process thereby depositing the film of material onto the oxide-based substrate.

Claim 30 (withdrawn): The method of claim 29, wherein the oxide-based substrate comprises glass, quartz or a ceramic material.

Claim 31 (withdrawn): A conductive susceptor for use in a deposition chamber for depositing a film of material onto a substrate during a plasma enhanced chemical vapor deposition process, the susceptor comprising:

a support plate mounted on a shaft, the support plate having an upper surface adapted to support a substrate wherein the upper surface has a conductive material disposed thereon and a lower surface connected to the shaft and interfacing with the shaft.

Claim 32 (withdrawn): The conductive susceptor of claim 31, wherein the substrate is an insulative non-metallic material.

Claim 33 (withdrawn): The conductive susceptor of claim 32, wherein the insulative non-metallic material is an oxide-based material or a plastic material.

Claim 34 (withdrawn): The conductive susceptor of claim 33, wherein the oxide-based material comprises glass, quartz or a ceramic material.

Claim 35 (withdrawn): The conductive susceptor of claim 31, wherein the conductive material is an amorphous silicon layer or a microcrystal silicon layer wherein either layer is optionally doped with phosphine; and

wherein any one of the silicon conductive layers is deposited onto the upper surface of the support plate by plasma enhanced chemical vapor deposition.